TWO EUROPEAN TORTRICIDAE (LEPIDOPTERA) NOT HITHERTO RECORDED FROM NORTH AMERICA.

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Dr. A. Glenn Richards, Jr., of the Department of Zoology of the University of Pennsylvania, recently sent me a number of specimens of two species of Tortricidae taken by him at Valley Stream, Long Island, New York, July 1, 1939. Both, to our surprise, turn out to be European species that have not hitherto been recorded in print from North America. Both are of potential economic importance. They are as follows:

(1) Argyrotoxa forskaleana Linnaeus. This is a common and widespread species in England and on the Continent. It is recorded by Meyrick (Revised Handbook of British Lepidoptera, London, 1929, p. 517-518) as feeding on Maple. The genitalia are figured in Pierce & Metcalf (The Genitalia of the British Tortricidae, 1922, p. 20, pl. 8). In the key to the species of Argyrotoxa given by Forbes (Lepidoptera of New York and Neighboring States. . . . Cornell University Agr. Exper. Sta. Memoir 68, June, 1923, p. 480) it would run to bergmanniana Linnaeus. It differs greatly from bergmanniana, however, in possessing but a single, dark, transverse band on the fore-wing basad of the subterminal band. This band begins slightly basad of the middle of the costa as a narrow line, which runs, slanting outward, to about the middle of the wing and then bends sharply and runs to the middle of the inner margin. lower half of this band is often covered by a light fuscous blotch, which may cover nearly a fifth of the area of the wing; but this blotch is entirely absent in some specimens. Two small, raised, black scale-tufts occur along the lower part of the band.

Dr. Forbes writes me that he has received quite a number of specimens at various times since 1934 from Mr. Roy Latham of Orient, L. I. Two specimens were received from Dr. Richards.

(2) "Tortrix" unifasciana Duponchel. Like the last, this species is common and widespread in England and continental Europe. It is recorded by Meyrick (loc. cit., p. 509) as feeding on Privet (Ligustrum). The genitalia are figured by Pierce (loc. cit., p. 5, pl. 2). In Forbes' key to the genera of Tortricidae (loc. cit., p. 377) it runs to Tortrix. From the North American species of this genus there listed it may be separated by its dark, orange-brown ground-color and by the very long costal fold of the fore-wing of the male, which exceeds the middle of the wing. As a matter of fact the

species does not appear to belong in the genus *Tortrix* at all, but for convenience this name is used here.

Dr. Richards writes me that the species was excessively common on his Privet hedge, so that he could have netted hundreds of specimens.

I have compared the male genitalia of two of the Long Island specimens with the genitalia of a specimen from England and one from Germany.

European specimens show considerable variation in color. Some have a rather light ground-color, on which a darker brown, transverse median band and subapical, costal patch stand out clearly. The majority, however, have the ground-color dark and the markings obscure. All the Long Island specimens conform to the latter type.

NOTES ON NOTIOPHILUS

By C. A. Frost, Framingham, Mass.

During my early collecting I captured a pair of novemstriatus and ever since then these elegant little creatures have greatly intrigued me. This species is the most common one locally but this is not at all evident until one knows where to look for them; it was many years before I discovered their abundance. They are fond of spots where green moss grows in wooded areas especially near streams and ponds on land sloping down to the water. This moss is probably of several species and one kind, called "Bear's Wheat" in Maine, has wheat-like grains at the tips of slender stalks; other kinds look like a carpet of green.

Notiophilus novemstriatus occurs from the last of March to the end of October and has been taken by sifting. A great number were sent me by Mr. O. L. Cartwright of Clemson College, S. C., among other material taken by a "sifting machine" at Florence, S. C., in February, 1938. A specimen was taken at Paris, Maine, on Sept. 19, 1928, probably by sifting.

I have found that if I sit down and remain for some time in favorable situations, sooner or later I see the armor of *Notiophilus* shining in the sun as it slowly picks its way over the moss or around stones and other obstructions. By raking away dead leaves and sticks or stirring up bunches of grass they are often started into sight. They are very clever in evading capture by slipping into a crevice in the ground or beside a stone and also by other means not yet clear to me.